1.3(a)(4)

CENTRAL INTELLIGENCE AGENCY WASHINGTON 25, D.C.

28 DEC 1961

MEMORANDUM FOR: The Director, Defense Intelligence Agency

SUBJECT

: MILITARY THOUGHT: "Certain Questions of the Control of Troops in Modern Operations", by Major-General A. Morozov, Lieutenant-General N. Lyashchenko, and Lieutenant-General of Tank Troops V. Arkhipov

- 1. Enclosed is a verbatim translation of an article which appeared in the TOP SECRET Special Collection of Articles of the Journal "Military Thought" ("Voyennaya Mysl") published by the Ministry of Defense, USSR, and distributed down to the level of Army Commander.
- 2. In the interests of protecting our source, this material should be handled on a need-to-know basis within your office. Requests for extra copies of this report or for utilization of any part of this document in any other form should be addressed to the originating office.

FOR THE DEPUTY DIRECTOR, PLANS:

Michaeld HEIMS

Enclosure

1.3(a)(4)

1.3(a)(4)



Original: The Director, Defense Intelligence Agency

cc: Military Assistant to the President

Special Assistant to the President for National Security Affairs

Director for Intelligence The Joint Staff

Assistant Chief of Staff, Intelligence Headquarters, U. S. Air Force

Assistant Chief of Staff for Intelligence Department of the Army

Director of Naval Intelligence Department of the Navy

Director, National Security Agency

The Director of Intelligence and Research Department of State

Director, Division of Intelligence Atomic Energy Commission

Chairman, Guided Missiles and Astronautics Intelligence Committee

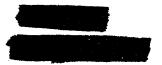
Deputy Director for Intelligence

Assistant Director for National Estimates

Assistant Director for Current Intelligence

Assistant Director for Research and Reports

Assistant Director for Scientific Intelligence





COUNTRY

USSR

SUBJECT

MILITARY THOUGHT: "Certain Questions of the Control of Troops in Modern Operations", by Major-General A. Morozov, Lieutenant-General N. Lyashchenko, and Lieutenant-General of Tank

Troops V. Arkhipov.

DATE OF INFO:

1961 (Prior to May)

APPRAISAL

OF CONTENT

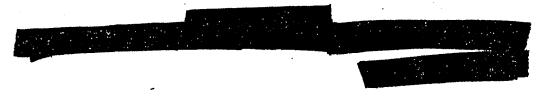
Documentary

SOURCE

A reliable source (B).

Following is a verbatim translation of an article titled "Certain Questions of the Control of Troops in Modern Operations" written by Major-General A. Morozov, Lieutenant-General N. Lyashchenko, and Lieutenant-General of Tank Troops V. Arkhipov".

This article appeared in the 1961 Second Issue of a special version of the Soviet military journal Voyennaya Mysl (Military Thought). This journal is published irregularly and is classified TOP SECRET by the Soviets. It is distributed only within the Ministry of Defense down to the level of Army Commander.



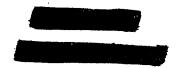
Certain Questions of the Control of Troops in Modern Operations

The nuclear/missile weapons and other achievements of science and technology have served as a basis for the further development and improvement of the theory of military affairs, and of the equipping and organizational structure of the troops. As a result of the changes which have taken place in the nature of modern operations, the combat capabilities of the types of armed forces and arms of troops are basically different from the operations and the combat possibilities of troops during the period of World War II. The substance of these changes has already been mentioned in our press.

All this has complicated, to a great degree, the direction of the combat activities of troops and has demanded of the organs of control more precise and coordinated work, ensuring swift reaction, flexibility, and combat efficiency in troop control.

It is evident that under such conditions of armed combat it is of the greatest importance to have more perfected forms and methods of troop control, utilizing all the latest achievements of science and technology, especially those of electronics, telemechanics, and automation. With this purpose in mind it is necessary to improve considerably the organizational structure of staffs and their technical equipment, especially in view of the fact that staffs have undergone virtually no changes in the organizational sense since World War II.

The experiences of World War II and practice in postwar exercises show that the commander's skill in directing troops depends, to a large extent, on his



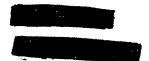


ability to find the correct forms and methods of control that would best answer the nature of the armed conflict and would fully conform to the situation. It is considered that the most favorable conditions for uninterrupted and firm control of troops was secured for the commander at the primary command post. However, despite all the positive qualities of this control organ, it was, and continues to be, unwieldy, with a large number of persons directly subordinate to the commander and having many channels in the work.

All this artificially complicated the coordinated and exact work of all elements of the command post, it burdened the commander's activities with secondary, and sometimes insufficiently coordinated, matters and distracted him from thoughtful, well-rounded analysis of the constantly changing situation and making timely decisions. In some commanders this bred indecision, lack of initiative, and the inability to make a courageous and correct decision quickly, based on a thorough knowledge of the developing course of events. As a result the commander was forced to resort to systematic briefing by all his commanders, in the course of which he became familiar with the situation and made a decision.

A similar method of work by commanders and staffs took a lot of time, and often troops did not have time to prepare for impending actions. If in the past this did not lead to appreciable results, then in modern conditions this practice has completely outlived itself and can have a fatal influence on the course and outcome of a battle and an operation.

In searching for more perfect forms and methods of control, wide dissemination was given to the practice of controlling troops by an operational group, small in composition and headed by a commander who guided the activities of the group in accordance with the given situation. The advantages of this method of control consisted of the fact that the exact and



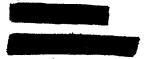


coordinated activity of a well-trained and efficient operational group which, besides the commander, had only a part of the directing staff immediately connected with control, ensuring flexibility and operational efficiency in making quick decisions, and briefing the troops on their missions in a timely manner, excluding the many stages and loss of time for various coordination. The fact that combat and operational documents were produced in a brief and clear form, without unnecessary details, warrants attention. Often battle orders and instructions were written directly from the commander's words, then were graphically plotted on maps, and less often were put out in the form of written documents. The missions of the troops were given orally with subsequent written confirmation.

The operational group had high mobility and the ability to deploy and redeploy secretly. All these advantages became evident in a clear and obvious form when controling tank and motorized troops during the years of the past war, whose experiences can greatly influence the further improvement of forms and methods of troop control.

However, we consider that the plain transfer of experience in the control of troops with the help of operational groups will not ensure a solution of all the most important problems that confront the organs of control in modern operations. Besides, it should be taken into consideration that often these operational groups replaced the staff as a whole, actually removed it from the direction of combat operations. It seems to us that the principle — the commander carries out control over the troops personally and through his staff — should remain unchanged, and that the commander is obligated to rely on his staff to an even greater degree.

The role of the staff, as the basic organ of the commander for ensuring firm and constant control of the troops, has grown significantly. In relation to





the staffs of the various arms of troops, it is the highest staff, and during the organization of coordinated work its directions must be received for strict execution.

As a result of this the role of the chief of staff also increases. He concentrates in his hands all the results of the many-sided and coordinated activity of the whole staff and must be ready /four or five words missing/ essential information to the commander, for making a quick, well-founded decision and to ensure that the troops are informed of their missions in a timely manner. All this will relieve the commander of the need to listen to a large number of commanders and will immeasurably raise the role of the staff as the only operational organ headed by the chief of staff, who is, at the same time, the deputy commander.

It is apparent that the existing organization of the staff does not fulfill modern requirements, because of its unwieldiness, its many channels, and lack of operational efficiency, and that it is in need of basic improvements. In order to avoid improvisation, which can be observed now in exercises, we propose that a permanent (under combat conditions) vorgan for direct management of troop combat operations be created on the base of the field command of a front (army), which would have a harmonious organizational structure. It would be limited in composition, flexible, mobile, and adequately operational. basis of this organ has to be composed of part of the operational and intelligence directorates (departments), of the combined-arms staff and the staffs of the arms of troops and types of armed forces. Such an organ, detached from the field command and called, for example, the control center, can and should appear as the main organ providing the commander with firm and constant \/ management of the combat activity of troops. At the front this organ will be the operational control center; in the army -- the tactical-operational control center, and in the division (corps) - the tactical control center.





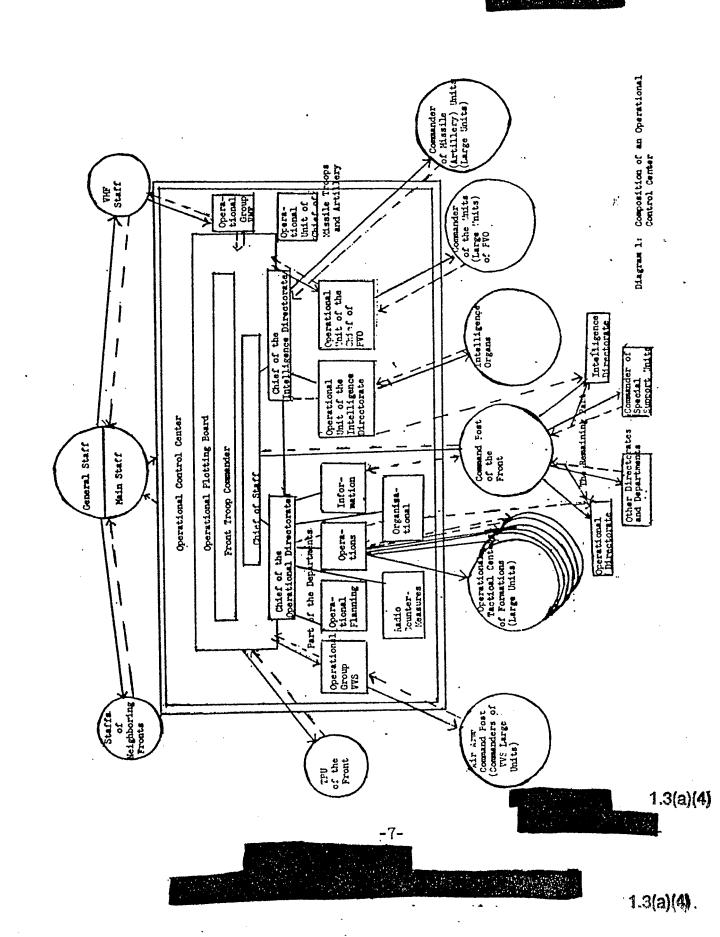
In our opinion, the control center has to be created to fulfill the basic function of providing constant control of the troops -- an operational function -- under the direct leadership of the chief of staff and to actually be the forward command post.

The operational control center (at the front) has to be composed of: the commander of front troops, a member of the Military Council, the chief of staff, the operational directorate of the staff, operational units from the apparatus of the chief of intelligence, of the chief of missile troops and artillery, of the chief of PVO troops, and in some cases operational groups from the staff of the air army of the front and the navy (VMF); also the minimum number of personnel necessary to provide support, servicing, and protection.

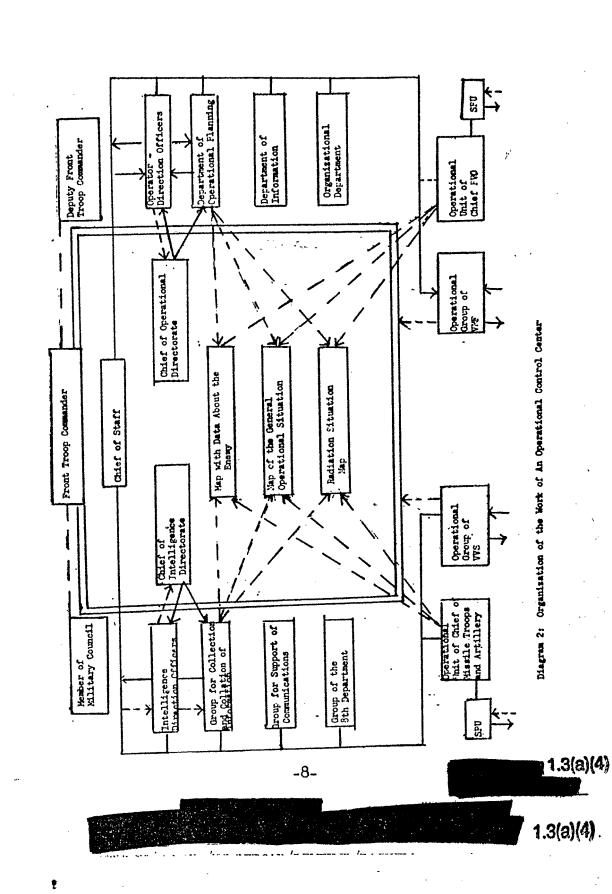
The nucleus of the operational control center is made up of the operational unit of the staff of the front with the chief of staff at its head; its basic working apparatus is the operational and intelligence directorates. Besides, in all operational matters the apparatus of the chief of missile troops and artillery, the apparatus of the chief of PVO and the operational groups of the staff of the front air army and VMF, are subordinate to the chief of staff, as the first deputy to the commander of troops. The chief of operational control has to direct all practical, everyday, executive aspects of the work of the operational center, of control and supervision over its quality and timeliness.

The make-up of the operational control center, the principle of its work, and coordination with the system of various control points are shown on Diagram #1.

The immediate work of the operational control center (at the front) is carried out, in our opinion, on a so-called operational plotting board, understood to mean a unified work area of the command, officers, and generals -- who represent the various departments, directorates, and operational groups. Maps (plotting boards), that continually show the situation in an easy-to-follow manner, are located at this work area.



In the main, the organization of the work of the operational control center on the operational plotting board appears to be as follows:



As shown on Diagram #2 all situation information goes to the operational plotting board of the control center. Its location is the basic work area of the front troop commander, the chief of staff, the chief of the operational directorate, the chief of intelligence, and, when necessary, the chiefs of the arms of troops and chiefs of the operational groups of the staff of the front air army and VMF.

The operational plotting board is operated by the operational planning department of the operational directorate. The chief of the operational directorate and the chief of the department of operational planning are responsible for continuous operation of the operational plotting board. In our opinion, all the work is done on three maps: the map with information about the enemy, the general operational situation map and the radiation situation map. Access of persons to the operational plotting board should be strictly limited.

It would be best to use a light prefabricated building to house the operational plotting board, where all the above-mentioned persons could work together and where there would be facilities to allow for concurrent work of the duty shift of plotting board operators. Specially adapted staff busses, and in individual cases even army supply directorate (USB) and standard medical (UST) tents, can be used for this purpose when necessary.

The special control points (operational units) of the chief of missile troops and artillery, the chief of PVO, and the operational groups of the staff of the front air army and the VMF, and also other departments and groups included in the composition of the operational control center, are located close to the place where the operational plotting board is housed.



The remaining personnel of the field command, who are not part of the operational control center, will become part of the command post or rear area control point (TPU), in accordance with the functions they fulfill. The interlocking of all three elements of the field command -- control center (the forward command post), the command post, and the rear area control point -- must fulfill the needs for a concealed and dispersed deployment in the terrain, and should be provided with reliable internal communications that would permit the carrying on of conversations in the clear.

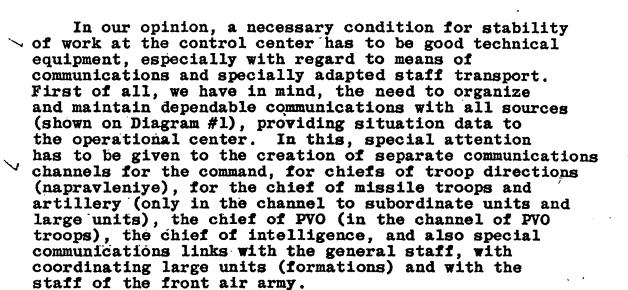
The organizational structure of the control centers that we propose gives us the opportunity to relieve the front troop commander (army commander and division commander) of the great loss of time needed to hear the situation reports, and will give him the opportunity to allot more attention to situation analysis and execute purposeful direction of troop combat activities.

The organization of such a control center also gives us the opportunity to eliminate the separation of collection, processing, and reporting of situation data about friendly troops, about the enemy, and especially about the radiation situation, which is very important under modern conditions. All information will be concentrated in one place and is reported directly to the commander.

At the command post there has to be a reserve operational plotting board with a group of plotting board operators, that would duplicate the plotting of the entire situation, in order to provide for the control of troops when the control center (PKP) is moved or in the event it is put out of action, to assume the control of troops.

On an analogous rear area operational plotting board must be entered all the rear area situation data, that is essential to making decisions concerning uninterrupted materiel-technical and medical support. The plotting of the missile rear area situation has to be done with extreme attention to operational use.

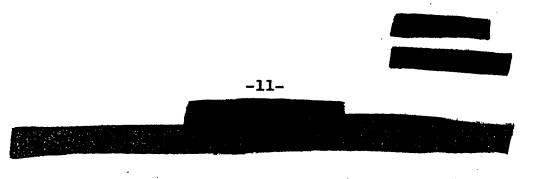




Just as important is the internal voice communications net, and also the television equipment which would ensure a free exchange of conversations within, as well as between, every control organ. Besides, a number of monitors (korrespondent) (who are relied on for this) must have the opportunity to determine that conversations on the internal system are in progress, by means of a special indicator (tablo), and when necessary to monitor the conversation in parallel or participate in it.

An important consideration is the need to transmit all reports to the operational plotting board, or the orders (commands) from the operational plotting board, via the internal voice system, to the chiefs of directions or to control points of the chiefs of the arms of troops, by clear text. In turn, they both, in communicating with the troops, must receive and transmit by means of encoding devices or cryptographic security (SUV) documents.

Such control centers already exist at the command posts of large units of PVO of the Country and in the staffs of fleets, and they fully justify their existence. It seems to us that there is a direct need to test, during exercises, a similar system of control in the ground troops.

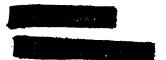


Considering our special interest in fulfillment of staff operational functions, we consider that operational control, as the basic function of the apparatus of command and of the staff also has to undergo changes in its organization, that would fully reflect the nature of the work they perform.

It is expedient to have the operational control of the front staff composed as follows: chief of operational control and his deputy, the departments of operational planning, operations (12 to 14 persons, basically direction officers), information (6 persons), radio countermeasures (4 persons), and organization (10 to 12 persons).

The operational planning department, composed of 10 to 12 persons (6 to 8 operations officers, one chemical, one engineer, 1 or 2 nuclear weapons specialists) prepares suggestions for making decisions regarding the use of front troops in an operation, and prepares the decisions of the front troop commander. in graphic or written form. During the course of combat operations, the officers of this department plot all the operational situation data on the operational plotting board /4 or 5 words missing/ reports to the command. They also maintain the radiation situation map, without which it is difficult to determine the degree of safety of friendly troops while they execute any maneuver on the battlefield, and take into account the average doses of radioactivity received by units and large units. The indicated composition of the department can ensure work at the control center in two shifts.

Practice shows that the operational directorate has to solve many organizational problems in addition to the operational ones, and has to utilize the working staff of the basic departments for this. This practice does not justify itself. It seems to us that it is necessary to include a reconnoitering group (2 or 3 persons) in the newly organized organization department, for carrying out reconnoitering of control point areas



and the placement and relocation of the latter. It should be assigned the duty for the area where the control points, units and subunits of support, servicing, and protection and also the organization of chemical and radiation detection are located; for this purpose it would be expedient to give the group a special observation post. Moreover, the organization department must have an administrative support group (2 or 3 persons) in charge of matters dealing with the organization of food and administrative outfitting of control points, and a group to perform classified work (5 or 6 persons), serving the whole staff of the control center.

The total staff of the operational directorate will be about 50 to 55 officers, enlisted men, and employees.

The diagram of control centers and other views on various questions of troop control, and the organizational structure of the control organs that we propose, are not necessarily without fault. It would be desirable to have other opinions expressed on the respective questions, which will help to solve them correctly.

Major-General A. Morozov

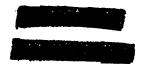
* * *

Planning the use of nuclear weapons in a front offensive operation is the principal question in modern conditions, but it is solved by applying the old methods of planning to the new conditions.

Experience gained from the exercises carried out in the Turkestan Wilitary District brought us to the following conclusion. As a result of the fact that, at the front, nuclear warheads and means of delivering them to the target are found under the subordination of various chiefs (the air army commander and the chief of missile troops and artillery), a lot of time is wasted by the troop commander when making the decision to use these weapons in an operation for the coordination of the questions: which weapons by whom, where and when must the strike be Normally, upon receipt of the operational directive, the chief of staff of the front informed the commanders of arms of troops and the chiefs of directorates and services about the combat mission received and announced the preliminary decision of the front troop commander. After this the plans for using nuclear weapons were prepared simultaneously in the operational directorate, by the chief of missile troops and artillery and in the staff of the air army. Later these plans were coordinated by the chief of staff of the front; in order to do this he listened to the views of the appropriate commanders, which consumed a lot of time. As a result of the limited time, the problems of planning the use of nuclear weapons, recording the rate of use of nuclear weapons, and the radiation situation, its analysis did not achieve the requisite solution.

A conviction arose, as a result of analysis, that the need had arisen for a special organ attached to the troop commander and the chief of staff of the front, for planning the use of modern means of combat, because the content of the questions solved by the staff of the front and the amount of work do not correspond to the existing organizational structure and had exceeded its limits.

When preparing for the front commander-staff exercise that was carried out in April 1960, a special group was created under the operational command of the staff of the front to plan the use of nuclear weapons and was composed of seven persons. The group was headed by the deputy



chief of the operational directorate. It was composed of the senior officers of the operational directorate, the staff of the chief of missile troops and artillery, the air army staff, the chief of chemical troops, the engineer troops staff, and the front staff intelligence directorate.

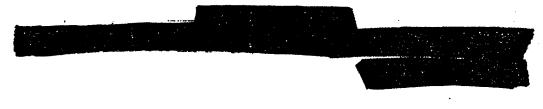
The group was assigned the following four basic preparation of considerations concerning the use of nuclear weapons for the front command, control and recording of the receipt and rate of use of nuclear weapons, recording of the radiation situation, and organization of troop antinuclear protection. Before the start of the exercise the volume and procedure of the work of the group and the functional duties of each officer were delineated. The chief of the group had to prepare and report to the chief of staff, or to the front troop commander, proposals for the most expedient use of nuclear weapons, and during an operation to summarize, analyze, and report all information regarding the use of nuclear weapons by both sides, and in particular, the radiation situation in the areas of combat operations and in the rear area of friendly troops.

It was decided that during the exercise the group would be located at the front command post since, basically, troops are controlled from there. However, experience showed that under the conditions of the Middle-Eastern (sredne-vostochny) Theater of Military Operations, when the commander often leaves the command post during the operation, and directs the troops from the forward command post, a group of this type has to be located with the front commander at the forward command post. One staff bus was allocated for the transportation and work of the group.

In the future, in our opinion, with the creation of such a group (department) it is necessary to take into consideration its ability to divide into two parts which have equal capacity for work, so that in case one part is put out of action the other can continue to fulfil the assigned mission.

When, during the exercise, the directives of the Supreme High Command for an offensive operation were



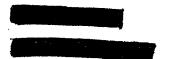


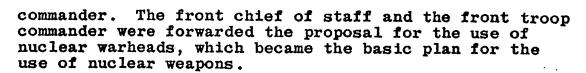
received, the group began its basic work of planning the use of nuclear weapons. Based on the operational orientation given by the chief of staff of the front, which was attended by the group chief, the group was given its primary assignment — to plan in detail the use of nuclear weapons in the first strike and during the fulfillment of the immediate and follow-up missions by the front troops.

First of all it was determined that the front would, have 48 units of nuclear ammunition available for the start of the operation, ready for use, including 34 missiles, 6 front cruise missiles (krylataya raketa). and 8 atomic bombs. During a thorough analysis of the situation it was determined that it was possible to use only 36 of the 48 units for the first strike, because of the 18 troop missiles, 12 missiles were located in divisions deployed far from the State border, and their use in the operation would be possible only after these divisions were committed to combat. Then enemy targets were evaluated and it was determined that it would be necessary to neutralize and destroy 29 targets with the first strike. However, using its own facilities the front could only carry out a strike against 20 targets and use 25 units of nuclear ammunition. The remaining 9 targets were located far in the rear, and strikes against them could be made more expediently by the means of the Supreme High Command.

After identifying the targets, the coordinates of the epicenter of the explosion, the numbers, yields, types of warheads and the nature of the burst, a chart was drawn up, showing the nuclear strikes to be carried out, with tentative determination of the results expected from the strikes.

In this way the group determined in detail the targets and the number of nuclear warheads for each target in the first strike for fulfilling the immediate and follow-up missions, and also those held in reserve by the front troop commander. All this work was coordinated with the chief of missile troops and artillery and the air army

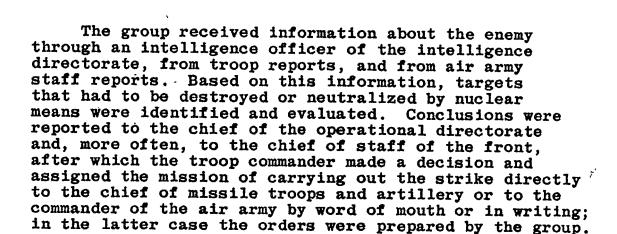




A separate plan for the use of nuclear weapons was not prepared; everything was represented graphically on the plan of the operation, including the targets of the strikes, the yield of the charge, the type of burst, the time of the strikes, and alternate targets were also, shown there. The ratio of forces in regard to warheads and means of delivery, and the distribution of nuclear weapons by missions were set out in tables on the map. Unified signals were established to carry out the nuclear strikes and were brought to the attention of the missile units and aviation. Combat orders for antinuclear protection of troops and installations were developed and were coordinated with the chief of chemical troops, chief of the rear, and the staff of the air army. During the planning period of the operation, the group prepared a map showing all the targets slated for neutralization and destruction by nuclear weapons, and the location of friendly troops and rear area installations; later nuclear strikes of both sides and the radiation situation were entered on the map. In this way the first stage of the group's work in planning the use of nuclear weapons ended.

During the combat operations, the group was busy identifying enemy targets, and when the troop commander made the decision, they planned the strikes against them, took into consideration the receipt and rate of use of nuclear weapons, and also kept track of the radiation situation, especially in cases of surface bursts. The results of the enemy strikes were analyzed and conclusions were drawn concerning the radiation situation and the possibilities for friendly troops to operate. Through the staff of the chief of missile troops and artillery and the air army staff the group kept track of the delivery of nuclear strikes and plotted them on the map; the dispositions of the troops were also plotted on the same map.

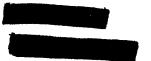


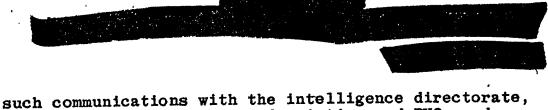


While working out the proposals to use nuclear weapons the group was in constant contact with the directorate of artillery armament, the air army staff and the front rear area staff, and was informed about the receipt and readiness of nuclear weapons and the provision of the missiles with special fuel. An officer from the chief of missile troops and artillery supervised the deployment of combat formations of missile units and officer-pilot supervised the basing of delivery aircraft; all this information was also plotted on the map.

During the exercise the group tried to keep track of losses inflicted on friendly troops by enemy strikes, but did not fulfill this task because it did not get the necessary summarized data from the troops. They came to the conclusion that the groups can give the losses only for separate strikes and for individual large units, and that the organizational and operations directorates should have the information about general losses as a result of nuclear weapons as well as from other means of destruction.

During the exercise the special group did not have selector communications (selektornaya svyaz) with the other directorates of the front staff. This should be considered to be an abnormal situation. Experience gained from the exercise showed that the group must have





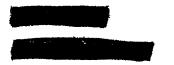
such communications with the intelligence directorate, the combined command post of aviation and PVO, and also with the troop commander and chief of the front in order that all the information about the enemy that reaches the intelligence directorate and the combined command post be transmitted immediately to the special group and be quickly plotted on the map and reported to the chief of staff and the commander.

As shown by the experience gained from the exercise, it is essential to have a map-screen (karta-ekran) on which all the enemy targets slated for neutralization or destruction are plotted. This will greatly simplify the work of the front troop commander in making a decision about the carrying out of nuclear strikes.

It should be considered a fault that officers -representatives of staffs and directorates -- were not
part of the operations directorate and were constantly
overloaded with work in their staffs and directorates
which reflected negatively on the work of the group.

Because such a group was organized for the first time in a district, many questions had to be resolved by feel, but during the exercise it played a big role and rendered considerable help to the front command in the timely and purposeful planning of the use of nuclear weapons. In many ways it simplified the work of coordinating strikes between aviation and missile units. At the critique of the exercise, the district troop commander pointed out that the group performed a large, useful task and that in the future it is necessary to create similar groups.

The group was created under the operations directorate of the front staff, but during the exercise it worked under the direct management of the front chief of staff and front troop commander and provided them with information, because in the final analysis, the decision to use nuclear means is made only by the troop commander. In addition one line missing did not fulfill the missions assigned to it.



In connection with this, the conclusion arises that there should be a similar permanent element directly subordinate to the chief of staff of the front who would work in close contact with the operations directorate. The staff of such a planning organ must be part of the T/O and be prepared in advance.

In our opinion it is necessary even during peacetime to have in the staff of the military district and directly subordinate to the district chief of staff a special department of modern means of combat and troop protection from weapons of mass destruction subordinate directly to the district chief of staff. In peacetime this department has to train the lower staffs in matters of planning the use of nuclear means, develop measures for and manage the protection of the troops from the means of mass destruction. In wartime such a department has to be expanded into a special directorate headed by the deputy chief of staff of the front. It should concern itself with planning the use of new means of combat and measures for protecting troops from weapons of mass destruction.

Lt. General N. Lyashchenko



* * *

We consider it necessary to enumerate a series of suggestions for the improvement of organizational structure of modern staffs, their equipping, and methods of work.

The existing organs of control, as was already mentioned in our press, do not fully conform to modern conditions; they are too cumbersome, have little mobility and their means of movement do not have adequate cross-country ability over the terrain. enough to point out that the staff and command of the army have up to 1,500 persons in their composition and up to 350 various motor vehicles, the staff and directorate of a division -- up to 500 persons and more than 100 various motor vehicles. These staffs are tied to the roads and bridges; it is difficult to move them; a lot of time is required for their deployment and redeployment, especially of army staffs. When, during offensive operations, tanks and motorized-rifle divisions move at a speed of 80-110 km per day, the staffs lag behind the troops.

It is also known that under conditions of mass use of nuclear/missile weapons the commander's decision has to be made, relayed to the executors, and carried out in a very short period of time, in many cases calculated in minutes or even seconds. Great command mobility is necessary for the successful control of nuclear/missile weapons. It is possible to have missiles with nuclear charges, tank, and airborne troops and not attain success because of tardiness in the combat use of these means.

It is necessary to review the organization structure of the staffs and sharply reduce the number of personnel and the means of transport in them. Success in the control of troops during modern operations will depend not on the number of generals and officers in the staff, but on the quality of their training, experience, the coordination and operational efficiency of the work, and also on the





technical equipment of the staffs. The control methods, by small operational groups, used in the tank troops during World War II, can be wholly and fully utilized even under modern conditions. The staffs and directorates of these large units and formations moved up in tanks or motor vehicles with radio sets, were noted for their high mobility and were trained and adapted for troop control in mobile types of combat operations.

In our opinion, instead of an army staff and staffs of the commanders of arms of troops and services, it is necessary to have a single staff for field command of an army with the chief of staff of the field command as head; at the same time he would also be the first deputy army commander. Organizationally the army field command must contain:

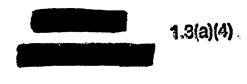
- the army command;
- chief of staff of the field command;
- department of operational and combat management of troops in operations and in battle;
- chiefs of arms of troops and services and their departments;
- the Party-political apparatus;
- army deputy commander for the rear area and control organs for the rear area.

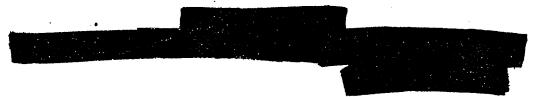
The staff of the army field command must have the necessary combat and technical equipment supply units and subunits subordinate to it.

In our opinion, the army field command, from the operational-tactical standpoint must be divided into a forward command post (PKP) and a rear command post (TKP).

The PKP can be composed approximately as follows:

- army commander;



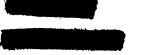


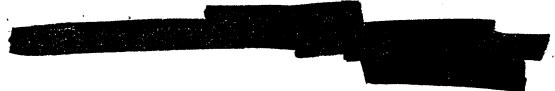
- member of the Military Council;
- chief of staff of the army field command;
- a group of officers from the operations, intelligence, and communications departments;
- chief of missile troops and artillery with a group of officers;
- chief of engineer troops with a group of officers;
- chief of chemical troops with a group of officers;
- chief of the PVO with a group of officers;
- deputy commander of the rear area with a group of officers;
- a group of officers, sergeants, and soldiers for combat security and guard duty.

In our opinion the PKP of the army must have altogether 45 to 50 generals and officers, 70 to 75 soldiers and sergeants, six tanks (three T-54 and three PT-76), 15 armored personnel carriers BTR-50P, 10 airplanes or helicopters, and also the necessary means of communications, radio sets, radar sets and television sets mounted in tanks, armored personnel carriers, helicopters, and airplanes.

The army rear command post will ensure, on orders from the army commander, the supply of technical equipment to the troops and, at the same time, will be the reserve control point in case the PKP of the army is put out of commission. It is headed by one of the army deputy commanders and can be composed approximately as follows:

- deputy army commander;
- deputy chief of the army political department;
- first deputy chief of the army field command staff;





- deputy chief of the rear fone or two words missing/;
- a group of officers from the operations, intelligence, chemical, engineering, political, PVO, and communications departments, and the department of the chief of missile troops and artillery;
- rear area officers, specialists in artillery, tank armament, motor vehicles and tractors, quartermaster, and fuel and lubricant (GSM) supply.

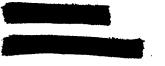
Directly subordinate to the army rear area command post will be:

- reserve commands for divisions and regiments;
- troop units and subunits for the elimination of the effects of enemy nuclear attacks and antinuclear and antichemical protection;
- depots and portable repair plants.

The advantage of this organizational structure of the army field command is, in our opinion, that all departments of the presently existing staff, and also the chiefs of arms of troops and services, will be directly subordinate to the chief of staff of the field command, since he is the first deputy commander. This will make it possible to concentrate all planning of an operation (battle) and the control over all forces and weapons in an operation and in a battle, in the hands of one person.

In the division command there should be, in our opinion, 12 to 15 generals and officers, among them a divisional commander, chief of staff of the division command, chiefs of arms of troops and services, and the Party-political apparatus. Analogously we propose that the army unit sub-divide the division command into a forward command post (PKP) and a rear command post (TKP).

The division PKP should have 5 medium tanks, 3 PT-76 light tanks, 3 armored personnel carriers and an air



flight (zveno) (3 to 5 MI-1 or MI-4 helicopters).

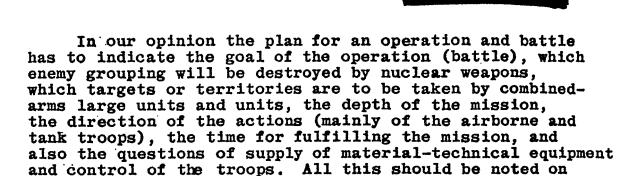
The creation of PKP and TKP as part of the army field command and division command increases, in our opinion, the combat readiness of the staffs, the mobility of command posts and their viability.

The existing cumbersome staffs reveal themselves by the presence of a large number of antennas, radar sets, busses and motor vehicles with high bodies. Besides, these vehicles are easily shot up with automatic weapon fire, and are pierced by mine and shell fragments. Under these circumstances it is difficult to camouflage the staffs and reliably ensure their viability. During combat operations in separate directions, in the presence of gaps and breaks in combat formations, with a sizeable separation of individual units and large units from the main forces, the staffs can be destroyed not only by nuclear weapons and aircraft, but also are subject to tank and infantry attacks, including enemy diversionary groups.

For this very reason the control points which we propose should be in tanks (T-54, PT-76), armored personnel carriers, and armored staff cars, as a result of which they will have cross-country ability to go anywhere, maneuverability, be small in number, have high viability, and will not stand out from the other tank and armored personnel carrier subunits. The presence of airplanes and helicopters in the control points will make them even more mobile and maneuverable.

In line with the change in the organization of the staffs, it is necessary to review the methods of planning operations and combat actions, and also the manner of troop management during the operation. In our opinion the plan of combat and operation under conditions of a nuclear/missile war has to consist of short combat documents. The absence of lengthy operational pauses, during which the planning and preparation for approaching operations was previously carried out, will probably make it necessary to carry out all planning during combat operations. Under these conditions there will not be time to prepare voluminous documents.





As soon as we abandon bulky operational plans and other operational documents, and superfluous military bureaucracy, cumbersome staffs will not be needed and there will be more operations and real management of the troops.

maps.

Everyone knows that the generals and officers of modern staffs and directorates of armies and divisions waste two-thirds of their time processing various types of documents that often are not needed for their work, and only one-third of their time is used for the direct control of troops, which is also done by only a small group, and not by the overwhelming number of staff generals and officers. To abolish decisively the unnecessary paperwork that has increased 2 or 3 times during the postwar period means the release of a large number of officers for specific control of troops in combat and operations. It would be more useful to employ the released generals and officers for the creation of reserve PKP and TKP which can be used in case the basic control points are put out of commission.

The organizational structure of large units, and units exerts great influence on the firm control of troops.

In our opinion the modern organization of an army, motorized-rifle division, and tank division do not conform to the conditions of modern missile/nuclear war. They are cumbersome, have little mobility, inadequate maneuverability and are difficult to control during combat and battle. This organization has had its day and has become obsolete, the same as the organization of modern staffs.





1.3(a)(4).

Without going into detail, we propose to switch to the brigade principle of structure for the combinedarms formations. Modern ground troops, it seems to us, have to be composed of missile divisions and brigades, of tank, mechanized, and airborne brigades.

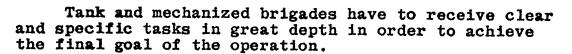
The army (possibly, it is better to call it the mobile combat group - BPG) is not constant in its composition. Its composition depends on the combat task to be fulfilled, the depth and width of the offensive zone, nuclear weapon support, and other conditions.

In the makeup of the army (BPG) it is necessary to have about: 5 to 7 tank or mechanized brigades (in any ratio), a missile brigade, two airborne brigades, 1 or 2 engineer brigades, 1 or 2 chemical troop brigades, 3 to 5 medical battalions (detachments), a rear services brigade, and a reserve brigade. For combat security the army (BPG) has to have an aerial reconnaissance regiment, an armored reconnaissance regiment, reconnaissance /6 to 8 words missing/. Besides, it may receive 1 or 2 missile brigades, an air division of fighter-bombers, a river-crossing brigade, and a chemical protection brigade as reinforcements.

The tank brigade must consist of from 3 to 5 tank battalions, and a battalion of organic missiles (voyskovaya raketa). A brigade may have up to 100 tanks, 50 percent of them light; in a mechanized brigade -correspondingly 3 to 5 mechanized battalions, 1 or 2 tank battalions, and a battalion of organic missiles.

All army rear services elements should be combined into a rear services brigade, and the rear services of tank (mechanized) brigades -- into a rear services battalion. The rear services have to be deployed on tracked or other vehicles with high cross-country ability. Helicopters have to play the principal role in the supply of nuclear weapons, for which the army has to have a regiment of helicopters (30 units), and about 10 helicopters in a brigade.





Notifying troops of their tasks has to be done by short combat orders through technical means of communication, by personal contact, or by delivery to battalions or brigades by airplane, helicopter, or tanks, of situation maps with the assigned mission.

It seems to us that the methods of control of troops stated above will provide the opportunity to plan a battle and operation in a more efficacious manner, and control the troops in a more concrete manner during them.

Only a few general problems regarding organization of control in modern operations are stated here. They can be resolved in greater detail and checked out only during command-staff and troop exercises. For this reason it would be expedient to carry out a series of exercises for the purpose of detailed study and development of problems of troop control, since the methods of troop control that now exist are in need of fundamental review.

Lt.-General of Tank Troops V. Arkhipov

